

Curriculum Vitae

A. PERSONAL PARTICULARS

Name: **Associate Professor Dr Mohd Rodzi Ismail**
 Date of Birth: 14 Sept 1970, Sungai Petani, Kedah, Malaysia
 Nationality: Malaysian
 Current Post: University Lecturer DS54
 Address: School of Housing, Building and Planning,
 Universiti Sains Malaysia, 11800 USM, Pulau Pinang,
 Malaysia
 Tel: 604-653 2841 Fax: 604-657 6523
 Email: rodzi@usm.my



B. ACADEMIC AND PROFESSIONAL QUALIFICATIONS

Year	Degree	Discipline	Institution
1994	BSc HBP Hons (Building Engineering), Second Class Upper Division	Building Engineering	Universiti Sains Malaysia
1995	MSc	Building Technology	Universiti Sains Malaysia
2000	PhD	Building Engineering	University of Liverpool, United Kingdom

C. WORK EXPERIENCE			
Year	Position	Field of Work	Place of Work
Industry			
Apr – Jun 1993	Trainee	Civil and Structural Works	Ranhill Bersekutu Sdn Bhd (Penang Branch), Penang
Aug 1995 – Aug 1996	Assistant Engineer	Civil and Structural Works	Tang and Associates Consultant Engineers, Penang
Academic & Research			
Apr – Jun 1994	Research Assistant	Construction Material	School of Housing, Building and Planning, USM
Jul 2000 – Dec 2005	University Lecturer DS2/DS45	Building Technology	School of Housing, Building and Planning, USM
Dec 2005 – Aug 2011	University Lecturer DS52	Building Technology	School of Housing, Building and Planning, USM
Aug 2011 - present	University Lecturer DS54	Building Technology	School of Housing, Building and Planning, USM
Administration			
Mar 2003 – Jul 2006	Programme Chairperson	Building Technology Programme	School of Housing, Building and Planning, USM
Jul 2004 – Jun 2007	Task Manager	Education and Training	Centre for Education, Training and Research in Renewable Energy and Energy Efficiency (CETREE), USM
Aug 2006 – Jan 2007	Acting Deputy Dean	Postgraduate & Research	School of Housing, Building and Planning, USM
Feb 2007 – Mar 2009	Programme Chairperson	Building Technology Programme	School of Housing, Building and Planning, USM
Apr – Dec 2009	Deputy Director	Education and Training	Centre for Education, Training and Research in Renewable Energy and Energy Efficiency (CETREE), USM
Jan 2010 – Jan 2012	Deputy Dean	Academic & Student Development	School of Housing, Building and Planning, USM
Nov 2011 – Nov 2014	Task Manager	Education and Training	Centre for Education, Training and Research in Renewable Energy and Energy Efficiency (CETREE), USM
Feb – Dec 2012	Deputy Director	Administration & Training	Transformation Office, USM
Jan - Dec 2013	Director	Administration & Training	Transformation Office, USM

Jan 2014 – Dec 2015	Deputy Director	Training & Consultation	Center for Innovation and Productivity in Public Administration (PIPPA), USM
May 2014 – May 2016	Deputy Director	Community/Industry Engagement	Knowledge Transfer Centre, USM

D. MAIN RESEARCH AREAS

- i. Indoor environment
- ii. Energy in buildings
- iii. Building services and engineering

E. PUBLICATION

Journal/E-Journal:

1. **Ismail, M.R.** & Barber, J.M. (2001). *A Field Study to Determine Inside Design Conditions for Malaysian Air-Conditioning Systems*. International Journal of Architectural Science Review. Vol 44.1. pp88-99
2. Mazran Ismail, Abdul Malek Abdul Rahman & **Mohd Rodzi Ismail** (2009). *Field Study on the Ventilation Performance of the Hybrid Turbine Ventilator (HTV) in the Tropics*. International Journal on Design and Manufacturing Technologies, Vol. 3, No. 2, July 2009. Satyabama University, India.
3. Mehrdad Mazloomi, Ahmad Sanusi Hassan Parmis Naraghi Bagherpour & **Mohd Rodzi Ismail** (2010). *Influence of Geometry and Orientation on Flank Insolation of Streets in an Arid Climate City*. American Journal of Engineering and Applied Sciences, **3** (3), pp540-544
4. Sulaiman R S Wafi and **Mohd Rodzi Ismail** (2010). *Occupant's Thermal Satisfaction, A Case Study in Universiti Sains Malaysia (USM) Hostels, Penang, Malaysia*. European Journal of Scientific Research, Vol.46, No.3, pp309-319
5. Sulaiman R S Wafi, **Mohd Rodzi Ismail** & Egbal Mohammed Ahmed (2011). *A Case Study of the Climate Factor on Thermal Comfort for Hostel Occupants in Universiti Sains Malaysia (USM), Penang, Malaysia*. Journal of Sustainable Development, 2011, 4, No. 5
6. Egbal Mohammed Ahmed, Osama Abaas, Mohammed Ahmed & **Mohd Rodzi Ismail** (2011). *Performance Evaluation of Three Different Types of Local Evaporative Cooling Pads In Greenhouses In Sudan*. Saudi Journal of Biological Sciences, **18** (1), pp45-51
7. Nasibeh Faghih, Md Azree Othuman Mydin & **Mohd Rodzi Ismail** (2013). *Ancient Climatic Architectural Design Approach*. European Researcher, Academic Publishing House Researcher, Vol.47, No.4-3, pp978-985
8. Hussin, M., **M.R. Ismail** & M. S. Ahmad (2013). *Subjective Perception of Thermal Comfort Study in Air- Conditioned University Laboratories*, Proceedia – Social and Behavioral Science, 91, pp192-200
9. M. Arkam C. Munaaim, Karam M. Al-Obaidi, **Mohd Rodzi Ismail** & Abdul Malek Abdul Rahman (2014), *Potential of Fibre Optic Daylighting Systems in Tropical Malaysia*. Indoor and Built Environment, pp1-15
10. M. Hussin, **M.R. Ismail** & M.S. Ahmad (2014), *Thermal Comfort Study of Air-conditioned University Laboratories*. International Journal of Environmental Technology and Management, pp430-449
11. Muhammad Arkam C. Munaaim, Karam M. Al-Obaidi, **Mohd Rodzi Ismail** & Abdul Malek Abdul Rahman (2014), *A Review Study on the Application of the Fibre Optic Daylighting System in Malaysian Buildings*. International Journal of Sustainable Building Technology and Urban Development, pp1-13
12. M. Hussin, **M.R. Ismail** & M.S. Ahmad (2014), *Air-conditioned University Laboratories: Comparing CO2 Measurement for Centralized and Split-unit Systems*. Journal of King Saud University - Engineering Sciences, pp1-11

13. Muhammad Arkam C. Munaaim, Karam M. Al-Obaidi, **Mohd Rodzi Ismail** & Abdul Malek Abdul Rahman (2014), *Empirical Evaluation of the Effect of Heat Gain from Fiber Optic Daylighting System on Tropical Building Interiors*. Sustainability, MDPI AG, pp9231-9243
14. Mohamed Fazly Eusoff & **Mohd Rodzi Ismail** (2015), *Potential of Building Automation System Towards Efficient Energy Management of Healthcare Buildings*. International Journal of Energy Technology and Policy, Vol. 11, No. 2, pp142-164
15. MA Che Munaaim, Karam M. AL-Obaidi, **M. R. Ismail** & A. M. Abd Rahman (2015), *The Behavior Of Internal Humidity From Fibre Optic Daylighting System Application*. Jurnal Teknologi (Sciences & Engineering) 75:9, pp1-7

Proceedings:

1. **Ismail, M.R.** (2001). *Possible Increase of Air-Conditioning Temperature After Applications of Passive Solar Design Elements as Retrofitting in a Building*. In Development of Passive Solar Design and Technology in Tropical Climates: Proceedings of the JSPS-VCC Seminar on Development of Passive Design & Technology in Tropical Climates (Rahman, A.M.A., ed.). Universiti Sains Malaysia. pp91-95 (ISBN 983-861-246-4)
2. **Ismail, M.R.** & Rahman, A.M.A. (2002). *Comfort Air-conditioning and Energy Conservation: Potential of Energy Savings by Setting a Higher Inside Temperature in the Malaysian Situation*. Proceedings of International Symposium: Building Research and the Sustainability of the Built Environment in the Tropics. Tarumanagara University, Indonesia. pp79-83 (ISBN 979-95755-2-4)
3. Awang, H., Ahmad, A.G. & **Ismail, M.R.** (2003). *Do We Need Construction History? Experiences of the School of Housing, Building and Planning, Universiti Sains Malaysia, Penang*. Proceedings of the First International Congress on Construction History, Vol 1 (Huerta, S., ed.). Instituto Juan de Herrera, Madrid. pp291-298 (ISBN 84-9728-070-9)
4. **Ismail, M.R.**, Ahmad, A.G. & Awang, H. (2003). *Structural Defects and Solutions: A Case Study of Fort Cornwallis, Penang, Malaysia*. Proceedings of the Eighth International Conference of: Structural Studies, Repairs and Maintenance of Heritage Architecture VIII (Brebba, C.A., ed.). Southampton: WIT Press. pp349-357 (ISBN 1-85312-968-2; ISSN 1368-1435)
5. Mohd Norawi Ali, **Mohd Rodzi Ismail** & Mohd Nain Awang (2006). *Logical Framework Approach in Enhancing Renewable Energy and Energy Efficiency (RE&EE) Projects in Secondary School Science Subject*. Konvensyen Teknologi Pendidikan Ke-19: Rekabentuk Pembangunan, Penggunaan dan Penilaian Teknologi Instruksional, Jilid 2 (Hanafi Atan *et al*, ed.). Persatuan Teknologi Pendidikan Malaysia. pp1295-1297 (ISBN 983-42733-1-2)
6. Bin Thabet, M., Ismail, A.M. & **Ismail, M.R.** (2006). *Analysis of the Thermal Behaviour in the Traditional Courtyard Houses of Yemen*. Proceedings of the International Conference on Sustainable Housing 2006 (ICSH2006). Universiti Sains Malaysia. pp231-238 (ISBN 983-41749-1-8)
7. Mazran Ismail, Abdul Malek Abdul Rahman & **Mohd Rodzi Ismail** (2007). *Assessment of the Potential of Solar Powered Turbine Ventilator (SPTV) for Enhancing Stack Ventilation in Malaysian Climate*. Proceedings of International Conference on Built Environment in Developing Countries 2007 (ICBEDC 2007), Volume II, Universiti Sains Malaysia, 3 - 4 Dec 2007. pp859 - 865. (ISBN 978-983-3986-20-0)
8. Mohammed Bakhlah, **Mohd Rodzi Ismail** & Abdul Malek Abdul Rahman (2008). *The Effect of Exterior Shading Devices on Indoor Climate*. Proceedings of The International Conference on Social Sciences and Humanities 2008 (ICoSSH'08), Universiti Sains Malaysia, 18 - 20 June 2008 (ISBN 978-983-2700-65-4)
9. Sulaiman R S Wafi & **Mohd Rodzi Ismail** (2009). *Thermal Comfort and Occupants: A Study of Thermal Indoor Environment in Selected Students Accommodation in Universiti Sains Malaysia (USM), Penang*. Proceedings of the 3rd International Conference on Built Environment in Developing Countries (ICBEDC 2009), Volume 1, Universiti Sains Malaysia, 2 - 3 Dec 2009. pp455 - 470. (ISBN 978-983-3986-60-8)
10. Bisam Ehessan A. Alhafiz, Ahmad Sanusi Hassan & **Mohd Rodzi Ismail** (2010). *Passive Cooling Design in Traditional Arabian Houses*. Proceedings of the 1st International

Conference on Sustainable Architecture and Urban Design (ICSAUD 2010). pg640 - 650. (ISBN: 978-967-5417-67-2)

11. Hanizam Awang, Norizal Md Noordin, **Mohd Rodzi Ismail** and Monir Hazim Mohammed (2010). *Properties of Hardened Foam Concrete*. Proceeding of the 4th International Conference on Built Environment in Developing Countries (ICBEDC2010), Volume 2, Universiti Sains Malaysia; 1 – 2 Dis 2010. Pp1013 – 1020. (ISBN 978-983-3986-60-6)
12. Rawnee Ho & **M R Ismail** (2011). *Data Center Operation Optimization Using Computational Fluid Dynamics (CFD)*, Proceedings Of International Building & Infrastructure Technology Conference 2011, Universiti Sains Malaysia, 7 – 8 June 2011.
13. Rawnee Ho & **M R Ismail** (2011). *Room Air Distribution Optimization*, Proceedings of International Building & Infrastructure Technology Conference 2011, Universiti Sains Malaysia, 7 – 8 June 2011.
14. Rawnee Ho & **M R Ismail** (2011). *Office Lighting Energy Saving with T5 Fluorescent*, Proceedings of 5th International Conference & Workshop on Built Environment in Developing Countries (ICBEDC 2011), Volume 1, Universiti Sains Malaysia, 6 – 7 Dec 2011.
15. Rawnee Ho & **M R Ismail** (2011). *Office Lighting Energy Saving with Brite 27 Unit*, Proceedings of 5th International Conference & Workshop on Built Environment in Developing Countries (ICBEDC 2011), Volume 1, Universiti Sains Malaysia, 6 – 7 Dec 2011.
16. Wahab, A.N.S., Khamidi, M. F., **Ismail, M. R.** (2013). *An Investigation of Mould Growth in Tropical Climate Buildings*, IEEE Business Engineering and Industrial Applications Colloquium 2013

Book:

1. **Mohd Rodzi Ismail** & Mohd Zin Kandar (2003). *Pemikiran Logikal*. In *Menyelesaikan Masalah Secara Sistemik & Efektif* (Munir Shuib, Azwan Azmawati Azman & Azlena Zainal, A., ed.). Kuala Lumpur: Prentice Hall. pp89-97 (9 pages)(ISBN: 983-2639-22-0)
2. **Mohd Rodzi Ismail** & Mohd Zin Kandar (2008). *Pemikiran Logikal*. In *Menyelesaikan Masalah Secara Sistemik & Efektif, Edisi Kedua* (Munir Shuib, Azwan Azmawati Azman & Azlena Zainal, A., ed.). Kuala Lumpur: Prentice Hall. pp108-119 (12 pages)(ISBN: 978-983-3927-22-7)
3. Abdul Malek Abdul Rahman, Muna Hanim Abdul Samad, **Mohd Rodzi Ismail** & Azizi Bahauddin (2009). *Towards a Low-Energy Building Design for Tropical Malaysia*. Universiti Sains Malaysia. (ISBN 978-983-861-411-5)
4. Main Rindam, Musa Ali, Mohd Rodzi Ismail & Saiful Yazan Alwi (Ed.)(2014). *Kreativiti dan Inovasi Menjana Insan Produktif*, Institut Tadbiran Awam Negara (INTAN) & Pusat Inovasi dan Produktiviti Pentadbiran Awam (PIPPA) (ISBN 978-983-3109-75-6)

Others:

1. **Mohd Rodzi Ismail**, Abd Rashid Mohamed, Azami Ibrahim, Siti Rozita Yahya, Daunah Sitam & Kamalavalli Selvadurai (2005). *Renewable Energy and Energy Efficiency Activity Module for Primary School – English*. (Kamarulazizi Ibrahim, Munirah Ghazali, Hashimah Mohd Yunus, Faridah Ibrahim & Mohd Hafiz Mohd Salleh, ed.). CETREE, Universiti Sains Malaysia. (ISBN: 983-41601-9-4)
2. **Mohd Rodzi Ismail**, Abd Rashid Mohamed, Azami Ibrahim, Siti Rozita Yahya, Daunah Sitam & Kamalavalli Selvadurai (2005). *Renewable Energy and Energy Efficiency Teacher's Guide Module for Primary School – English*. (Kamarulazizi Ibrahim, Munirah Ghazali, Hashimah Mohd Yunus, Faridah Ibrahim & Mohd Hafiz Mohd Salleh, ed.). CETREE, Universiti Sains Malaysia. (ISBN: 983-3474-00-4)
3. Ilias Said, **Mohd Rodzi Ismail** & Mohd Wira Mohd Shafie (2008). *A Study on the Importance of Education and Training Among Pilgrims*. Jurnal Pengurusan JAWHAR, Vol. 2, No.1. (ISSN 1985-2010)
4. **Mohd Rodzi Ismail** (2010). *Climate Change and Energy Efficiency*. In *Integrating Climate Change Issues in Southeast Asian Schools - A Teachers' Guidebook*, Azian T.S. Abdullah (Ed). SEAMO RECSAM. Pp125-139. (ISBN 978-967-930-019-2)
5. Hussin Mamat, **Mohd Rodzi Ismail** & Mohamad Sofian Ahmad (2011). *Review of Indoor Environmental Quality (IEQ) in Malaysia*, International Engineering for Sustainability Conference (INESCO) 2011, Universiti Sains Malaysia, 14 – 16 Oct 2011.

6. Hussin M, **M. R. Ismail** and M. S. Ahmad (2012). *Subjective Perception of Thermal Comfort Study in Air-Conditioned University Laboratories*. Proceeding of 2nd USM-PSU International Conference on Art and Sciences 2012: Transforming Research for Sustainable Community, 2 - 4 December 2012.

F. RESEARCH

National Grant:

1. "Development of Lightweight Ferro-cement Sandwich Panel for Modular Housing and Industrialised Building Systems"; (1 Apr 2004 – 31 Mar 2007)
2. "The Impact of Varied Design Modifications to the Environment Performance and Energy Consumption at the Glass Showcase Building in the Malaysian Climate"; (15 Oktober 2007 – 15 Oktober 2009)
3. "Study on the Contribution of KTP Towards Human Capital Development Through Marketability of Graduate Intern"; (Sept 2015 – Sept 2017)
4. "Sources and Potential Effects of Indoor Air Quality and Thermal Comfort in Mosque Buildings"; (Oct 2015 – Mar 2018)

University Grant:

1. "Effect of Light Energy Saving Opportunities in University Dormitories on Students' Likeness and Comfort"; (1 Nov 2001 – 31 Oct 2002)
2. "Fire Safety Guidelines for Heritage Buildings (Shops) in Georgetown, Pulau Pinang and Bandar Hilir, Melaka"; (1 Feb 2002 – 31 Jan 2003)
3. "Evaluation Study of Climatic Design Performance (Thermal, Natural Airflow and Lighting of Tadika Building)", (1 Jan 2003 – 31 Dec 2004)
4. "Formation of Operations Office USMEMS, Energy Management Project Through 'Good Housekeeping' Approach in USM Campus and Data Collection for 'Green House Gases Emission' USM-CETDEM Project"; (Mar 2004 – Feb 2005).
5. "Reducing Electricity Energy Consumption From Artificial Lighting and Air Conditioners in Administration Office"; (Sept 2004 – Mar 2005)
6. "Energy Audit of the Universiti Sains Malaysia Lecture Halls Complex"; (15 Nov 2005 – 14 Nov 2007)
7. "Inducing the Stack Effect Using Turbine Ventilator, Extractor Fan and Appropriate Solar Panel"; (1 Apr 2006 – 31 Mar 2008)
8. "Use of Oil Palm Ash as Cement Replacement in Concrete"; (1 Apr 2006 – 31 Mar 2008)
9. "A Study on the Industrial Waste Materials Used as Possible Components into Blended Cements"; (Okt 2007 – Sept 2009)
10. "The Use of Lightweight Infill Material for Profiled Steel Sheet Dry Board Floor System (PSSDB)"; (1 Apr 2010 – 31 Mar 2012)
11. "Indoor Environment Quality at Laboratories in University Sains Malaysia"; (1 Feb 2011 – 31 Jan 2013)
12. "Wind-Induced Ventilation in High-Rise Residential Buildings: Case Study of Seafront Apartment Buildings in Penang Island"; (15 Aug 2011 – 14 Aug 2013)

G. TEACHING AND SUPERVISION

Teaching:

Under-graduate level

1. REG 363/3 - Site Investigation (2000 – 2001)
2. RUS 101/5 - Integrated Studio 1 (2001 – 2006)
3. HTV 201/2 - Thinking Technique (2001 – 2012)
4. RUS 102/5 - Integrated Studio 2 (2002 – 2003)
5. REB 202/5 - Building Studio 2 (2002 – Present)
6. REB 302/5 - Building Studio 4 (2002 – 2006)
7. REG 261/3 - Building Services (2003 – Present)
8. REG 265/3 - Infrastructure Technology (2003 – Present)
9. RAT 430/3 - Energy Efficient Building Design Technology (2005 – 2006)
10. REB 201/2 - Building Studio 1 (2006 – 2007)

Post-graduate level

1. REG 561/4 - Construction and Materials Technology (2000 – 2001)
2. REG 562/4 - Building Services Technology (2000 - Present)
3. REL 572/8 - Building Technology Research Project (2000 – Present)
4. RET 564/5 - Building Automation System 2 (2001)
5. RLD 512/3 - Hydrology & Watershed Management (2001)
6. RET 531/5 - Construction Geotechnic 1 (2001)
7. RET 532/5 - Construction Geotechnic 2 (2001)
8. RET 521/5 - Energy in Buildings (2002 – 2008)
9. RET 564/5 - Building Control and Instrumentation (2002 – 2008)
10. RUL 574/8 - Dissertation (Bachelor of Architecture) (2002 - 2003, 2007 – 2008)
11. RET 531/5 - Soil Mechanics & Foundation Structures (2003)
12. RET 522/5 - Building Maintenance (2003 – 2004)
13. RML 572/8 - Project Management Research Project (2004 - 2005)
14. RET 563/5 - Building Automation System (2008)
15. RHS 513/4 - Housing and Technology (2008 – Present)
16. RET 523/5 - Energy and Building Maintenance (2009 – 2013)
17. RET 566/5 - Intelligent Building (2009 – 2012)
18. REG 521/4 - Building Science and Environment (2010 - Present)
19. REG 563/4 - Sustainable Building (2014 – present)

Supervision of Research Students:

PhD level:

1. Mansoor Mohammed Bin Thabet (2006), *Thermal Behaviour in the Traditional Courtyard Houses in Yemen*. Universiti Sains Malaysia.
2. Yaser Khaled Abdulrahman Al-Sakkaf (2009), *Stabilising Compressed Earth Blocks for the Clay Buildings*. Universiti Sains Malaysia.
3. Sulaiman Al-Wafi (2013), *Thermal Comfort of Students' Accommodations in Universiti Sains Malaysia*. Universiti Sains Malaysia.
4. Egbal Mohammed Ahmed Yousef Elmsaad (2013), *Effect of Types and Thickness of Evaporative Cooling Pads on Ventilation Rates in Greenhouses in Sudan*. Universiti Sains Malaysia.
5. Muhammad Arkam Che Munaaim (2014), *The Assessment of Fibre Optics Daylighting Application for Interior Illumination in Malaysia Skies*. Universiti Sains Malaysia.

Masters level:

1. Mohamed Fazy Eusoff (2015), *Evaluation of Air-Conditioning and Mechanical Ventilation (ACMV) Performance in Ambulatory Care Centre (ACC) Hospital Pulau Pinang*. Universiti Sains Malaysia.

Supervision of Dissertation for Masters by Coursework:

1. Main Supervisor – 30 students
2. Co-Supervisor/Reader – 30 students

Supervision of Final Year Project (FYP):

5 students

H. ACADEMIC RECOGNITION AND LEADERSHIP

1. **Scientific Committee Member;** International Conference on Climate Changes and the Built Environment, 2002
2. **Panel of Technical Assessor;**
 - a. CIDB Research Grant Application, 2002.
 - b. USM Institute of Postgraduate Studies Best Research Award 2009, 14 Oct 2009
 - c. Evaluation of USM University-Community/University-Industry Engagement/Flagship Projects 2012; 2013
3. **Evaluator of Research Grant Application**
 - a. USM Short Term Research Grant, 2012
 - b. USM Research University Grant, 2013
4. **Excellent Service Award (APC),** Universiti Sains Malaysia; 2003, 2006, 2010
5. **Visiting scientist;** JSPS-VCC FY2003 Programme, Kyoto University, 13 - 20 Dec 2003
6. **Internal Thesis Examiner;**
 - a. **Masters** – 5 candidates
 - b. **PhD** – 2 candidates
7. **External Thesis Examiner;**
 - a. **Masters**
 - Ahmad Mahamad Al-Yacouby. *The Effects of Solar Reflectance Index of Roof Tiles and Other Design Features on Indoor Thermal Comfort for Housing in Tropical Climate*, **Universiti Teknologi Petronas**, 2012.
 - Norita Johar. *Assessing the Feasibility of Open Wards for Airborne Infectious Isolation Use During Seasonal Pandemic Crisis. A Case of Sungai Buloh Hospital*, **International Islamic University Malaysia**, 2013.
 - Syed Ahmad Farhan Syed Ahmad Iskandar. *Optimization of Reflective Insulation Thickness in Roof of Residential buildings in Hot-Humid Calimate*, **Universiti Teknologi Petronas**, 2013.
 - b. **PhD**
 - Behzad Rahmani. *Investigation on the Possibility of Lowering the Solar Heat Gains in Office Building with Double Skin Facade Strategies in Tropical Climate of Malaysia*, **Universiti Teknologi Malaysia**, 2012.
8. **Academic Assessor**
 - a. Building Services course reviewer for Wawasan Open University (WOU) (2011 – 2012)
 - b. External examiner for Faculty of Engineering Technology, Universiti Tun Hussein Onn (UTHM) (2014-2015)
 - c. Examiner for 2011 the Institution of Surveyors Malaysia Professional Examination, Quantity Surveying Division, The Institution of Surveyors Malaysia (ISM), 8 Jul 2011- 5 Aug 2011
9. **Manuscript reviewer;**
 - a. **Journal** of Industrial Technology, SIRIM Berhad, 2005; (1 article)
 - b. **Journal** of Construction in Developing Countries (JCDC); 2007 (3 articles), 2008 (2 articles), 2010 (1 article), 2013 (1 article), 2015 (1 article)
 - c. **International Conference** on Built Environment in Developing Countries (ICBEDC); 2008 (1 article), 2009 (2 articles)

- d. **International Conference** on Sustainable Architecture & Urban Design 2010 (ICSAUD2010); (1 article)
 - e. 2nd **International Conference** on Environmental Research and Technology (ICERT 2010); (2 articles)
 - f. **International Graduate Tourism Research Conference** 2010; (1 article)
 - g. **Pusat Penerbitan Universiti** (UPENA), Universiti Teknologi MARA, Shah Alam, 2010; (1 manuscript)
 - h. **Unit Penerbitan, Universiti Malaysia Perlis**, 2011 (1 manuscript)
 - i. **International Conference** on Environmental Research and Technology (ICERT 2012); (1 articles)
 - j. **Pejabat Penerbit, Universiti Tun Hussein Onn Malaysia**, 2012 (1 manuscript)
 - k. **ELSEVIER's** journal of **Sustainable Cities and Society (SCS)**, 2013 (1 article)
 - l. **ELSEVIER's Journal of Thermal Biology**, 2013 (1 article)
 - m. **Energy and Environmental Research**, 2014 (1 article)
 - n. **ELSEVIER's Journal of Building Engineering**, 2015 (1 article)
10. **Fellowship**; Training Program on Energy Conservation Training Program in Japan for Malaysia (ECMA); Organised by Association for Overseas Technical Scholarship (AOTS); Yokohama Kenshu Centre, Japan; 6 – 19 Jan 2005
11. **Member of Editorial Board**;
- a. Proceedings of International Conference on Built Environment in Developing Countries 2007 (ICBEDC 2007), Volume I&II, Universiti Sains Malaysia, 3 - 4 Dec 2007.
 - b. Proceedings of International Conference on Built Environment in Developing Countries 2008 (ICBEDC 2008), Volume I&II, Universiti Sains Malaysia, 3 - 4 Dec 2008.
 - c. Proceedings of the 3rd International Conference on Built Environment in Developing Countries (ICBEDC 2009), Volume I&II, Universiti Sains Malaysia, 2 - 3 Dec 2009.
 - d. Proceedings of the 4th International Conference on Built Environment in Developing Countries (ICBEDC 2010), Volume I&II, Universiti Sains Malaysia, 1 - 2 Dec 2010
12. **Invited speaker/Facilitator**;
- a. Speaker for Research Grant Application Grid Seminar; 29 Mac 2009; Centre for Collaborative Technology, International Islamic University.
 - b. Logical Framework Analysis Workshop; 27 Mei 2009; Institut Farmaseutikal Malaysia.
 - c. Preparation Workshop on Proposal Paper for Tenth Malaysia Plan (RMK-10) Development Using the Logical Framework Approach; 20 July 2009; Nuklear Malaysia.
 - d. RECSAM's Regular Course PS-144: Exploring Science, Technology, Environment and Society (STES) Education for Sustainable Development at Primary Level; 30 July 2009; RECSAM.
 - e. USM-AKEPT Young Lecturers Leadership Course; July 2012; August 2013

I. CONSULTANCY

1. **Endorsement of laboratory test results for soil, steel and concrete tests**; USAINS Holding Sdn. Bhd.; 2000 - 2012
2. **Maliau Basin Studies Centre – Energy Demand and Energy Supply**; Yayasan Sabah & DANCED; Nov 2001 – Jan 2002.
3. **Structure Investigation at Seri Delima Flats, Sungai Ara**; Kopersai Tunas Muda Sungai Ara Berhad; 1 – 30 Jun 2005
4. **Proposed Renovation of Building No.57, Jalan MacAlister, Lot 1730, Seksyen 12, Daerah Timur Laut, Pulau Pinang**; LSW Builders Sdn Bhd; 18 Jul – 11 Aug 2005
5. **Workshop on Bridging Academic Programmes: Certificate-Diploma-Degree**; Majlis Amanah Rakyat (MARA); 11 – 13 Aug 2005.
6. **Air Quality Test at Main Library 1**; Universiti Sains Malaysia (USM) library; 18 – 29 Sept 2001

7. **Technical consultant** for the Development of Institut Farmaseutikal & Nutraseutiukal Malaysia (IFN) Building; 2 Aug 2007
8. **Energy Audit in Government Buildings – University Malaya Medical Centre (UMMC) and Ministry of Finance (MoF)**; Ministry of Energy, Water and Communication (MEWC); 11 July 2008 – 11 Oct 2008
9. **Development of Transformation Plan**; USAINS Holding Sdn Bhd; Sept – Nov 2014
10. **Short Course on Logical Framework Approach (LFA) for University's Administrators**; Centre for Innovation and Productivity in Public Administration (PIPPA); 22 Apr 2014
11. **Evaluation of Strategic Plan And Development of 11th Malaysia Plan Project (2016-2020)**; Department of Survey And Mapping Malaysia (JUPEM); Oct 2014 – Apr 2015
12. **Development of IMT-GT University Network Strategic Action Plan (2016-2018)**; Centre of IMT-GT Sub-regional Cooperation (CIMT); Jun – July 2015 and Sept – Oct 2015
13. **Development of Teaching and Assessment Strategy (TAS) of academic programme**; USAINS Holding Sdn. Bhd.; Jun – July 2015

J. SERVICE TO THE UNIVERSITY

Administration

1. **Programme Chairperson** (Building Technology Programme); 26 Mar 2003 – 25 Mar 2005; 26 Mar 2005 – 25 Mar 2007; 26 Mar 2007 – 26 Mar 2009
2. **Task Manager** (CETREE); 1 July 2004 – 30 June 2005; 1 July 2005 – 30 Jun 2007
3. **Acting Deputy Dean** (Postgraduate & Research); 1 Aug 2006 – 31 Jan 2007
4. **Deputy Director** (CETREE); 1 Apr 2009 – 31 Dec 2009
5. **Deputy Dean** (Academic & Student Development); 1 Jan 2010 – 31 Jan 2012
6. **Deputy Director** (Transformation Office); 1 Feb 2012 – 31 Dec 2012
7. **Director** (Transformation Office); 1 Jan 2013 – 31 Dec 2013
8. **Deputy Director** (Centre for Innovation and Productivity in Public Administration – PIPPA); 1 Jan 2014 - Present
9. **Deputy Director** (Knowledge Transfer Centre); 2 May 2104 - Present

University Committee/Programme

1. **Committee member**; USM Energy Management Consultant (USMEMC); 14 Oct 2001
2. **Committee member**; University Occupational Health and Safety Committee (JKKPU); Since 11 Aug 2008
3. **Committee member**; USM Committee of Revision and Updating of the Contract Documents for Occupational Safety and Health; Since April 2010
4. **Committee member**; Student Loan Fund Committee; Since July 2010
5. **Committee member**; USM CCTV Committee; 21 June 2012 – present
6. **Chairperson**; Committee to Review Implementation of Emergency System; Since 7 Oct 2009
7. **Head of facilitator/facilitator**; Logical Framework Approach (LFA) session for PIMPIN Programme (Training Unit); 2005 - 2008
8. **Head of PSPTN CAP - Leadership**; Jul 2012 – Dec 2013
9. **Committee member**; The University Management Committee (JKPU); Jan – Dec 2013
10. **Committee member**; Screening and Monitoring Committee for Post-Doctoral Fellow; Mar –Dec 2013
11. **Committe member**; USM Talent Development Panel; Mar – Dec 2013
12. **Member**; The University Sustainability Council (Majlis Kelestarian Universiti); Mar – Dec 2013

School Committee/Programme

1. **Chairperson** (Environmental Laboratory Committee); 22 Oct 2002 – 25 Mar 2003; 1 Sept - 31 Dec 2010; Jan – Dec 2012; Jan 2013 – May 2015
2. **Committee member**; Graduate Studies Committee
3. **Committee member**; Fellowship Scheme Application Interview Panel

K. SERVICE TO COMMUNITY

1. **Exco member**; USM Academic and Administrative Staff Association (PKAP USM); Since 2010
2. **Member**; Majlis Bersama Jabatan (MBJ); Jan - Dec 2013